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**(54)【発明の名称】**

ICカード、各種電子、磁気、光記憶装置付き携帯装置を利用したコンピュータ保安方法及び装置

**(54)[TITLE OF THE INVENTION]**

The computer security method and apparatus using a portable equipment with an IC card, various electrons, a magnetism, and an optical memory device

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596116374**[ID CODE]**  
596116374**【氏名又は名称】**  
小林 清朗**[NAME OR APPELLATION]**  
Kobayashi Kiyooki**【住所又は居所】**  
東京都杉並区高井戸西1-9-3  
8**[ADDRESS OR DOMICILE]****(72)【発明者】****(72)[INVENTOR]****【氏名】**  
小林 清朗**[NAME OR APPELLATION]**  
Kobayashi Kiyooki**【住所又は居所】**  
東京都杉並区高井戸西1-9-3  
8**[ADDRESS OR DOMICILE]****(57)【要約】****(57)[ABSTRACT OF THE DISCLOSURE]****【課題】****[SUBJECT OF THE INVENTION]**

コンピューターや通信装置等の電子機器の保安、防犯、保護による安全の保障の確率を高める方法を求める事。

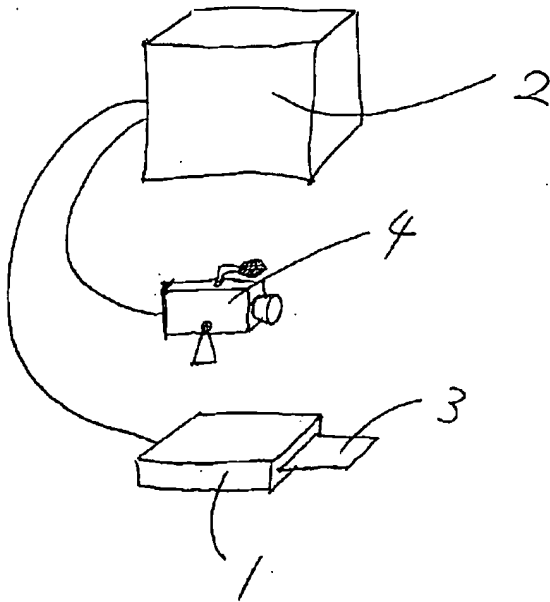
Search for the method of raising the probability of security of the safety by security, crime prevention, and protection of electronic equipments, such as a computer and a communication apparatus,

**【解決手段】**

ICカード記録及び読み取り装置1を利用して、保護対象のコンピューター等の各種電子機器2の製造者、販売者、保守者、所有者、法律施行者、警察官、司法捜査官、管理者、使用者等に対応する一つ以上のアカウント、ジョブ、プロセス等の任意に規定した保護対象作業又は資源単位ごとに、保護及び保安用各種情報と、過去からの使用記録、更に一意性を持たせるための情報を付加し、これを利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報と、保安用又は保護用内部処理用に各種暗号法により暗号化された情報の二つの形で各種電子機器2とICカード3に分散して記録し、保安用又は保護用と使用記録等の情報の記録用に利用する方法。

**[PROBLEM TO BE SOLVED]**

Using IC-card record and reading equipment 1, it adds the variety of information for protection and security, and the use record from the past and further the information for giving uniqueness for every operation for protection or resource units specified as desired, such as 1 or more account, a job, and a process corresponding to the manufacturer, a seller, a maintenance person, an owner, a law enforcement person, a policeman, a judicial investigator, an administrator, a user, etc. of the various electronic equipments 2, such as a computer, for protection, it records on the various electronic equipments 2 and IC card 3 dispersedly in two forms, the information which is not enciphered by the various code methods for seeing when a user wants to regard this as there being no worries about an alteration etc., and the information enciphered by various code methods for the object of internal processings for security, or protection, a method to use for the object for security or the object for protection, and record of information, such as use record.



## 【特許請求の範囲】

## [CLAIMS]

## 【請求項1】

ICカード記録及び読み取り装置1  
 を利用して、コンピューター又は  
 通信装置等の各種電子機器2の  
 一つ以上の製造者、販売者、保  
 守者、所有者、法律施行者、警察  
 官、司法捜査官、管理者、使用者  
 等に対応する一つ以上のアカウ  
 ントやタスク、ジョブ、プロセス等の  
 任意に規定した保護対象作業又  
 は資源単位ごとに、防犯用又は  
 保安用又は保護用又はこれらす  
 べての用途の各種情報と、必要  
 であれば更に、使用記録等の情  
 報をICカード3に記録し、それを  
 防犯用又は保安用又は保護用又  
 はこれらすべての用途と使用記録

## [CLAIM 1]

Using IC-card record and reading equipment 1,  
 for every operation for protection or resource  
 units specified as desired, such as 1 or more  
 account, a task, a job, and a process  
 corresponding to the manufacturer, a seller, a  
 maintenance person, an owner, a law  
 enforcement person, a policeman, a judicial  
 investigator, an administrator, a user etc. of 1 or  
 more various electronic equipments 2, such as  
 a computer or a communication apparatus, the  
 method to record, on IC card 3, the variety of  
 information of the object for crime prevention,  
 the object for security, the object for protection,  
 or all these uses, and further use record, etc. if  
 required, and use them for record of information  
 for the object for crime prevention, the object for

等の情報の記録用に利用する方法。

security, the object for protection or all these uses, and use record, etc.

**【請求項2】**

請求項1の方法において、防犯用又は保安用又は保護用又はこれらすべての用途用情報又は使用記録等の情報をコンピューターを含む各種電子機器2とICカード3に分散して記録する方法。

**[CLAIM 2]**

In the method of Claim 1, a method to distribute and record the object for crime prevention, the object for security, the object for protection, all these information for uses, or the information such as use record, on the various electronic equipments 2 and IC card 3 containing a computer.

**【請求項3】**

請求項1と2の方法において、防犯用又は保安用又は保護用又はこれらすべての用途用情報の中に過去からの使用記録を含ませ、更に一意性を持たせるための情報を付加し、これを利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報と、防犯用又は保安用又は保護用又はこれらすべての用途用内部処理用に各種暗号法により暗号化された情報を防犯用又は保安用又は保護用又はこれらすべての用途用情報に含ませ記録する方法。

**[CLAIM 3]**

In the method of Claim 1 and 2, it includes the use record from the past in the object for crime prevention, the object for security, the object for protection, or all these information for uses, furthermore, adds the information for giving uniqueness, a method to let include the information which is not enciphered by the various code methods for seeing when a user wants to regard this as there being no worries about an alteration etc., and the information enciphered by various code methods the object for crime prevention, the object for security, the object for protection, or for all these uses for internal processings in the object for crime prevention, the object for security, the object for protection, or all the these information for uses, and record it.

**【請求項4】**

請求項3において利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報の記録を除く方

**[CLAIM 4]**

A method to exclude record of the information which is not enciphered by the various code methods for seeing when a user wants to conclude that there are no worries about an

法。

alteration etc. in Claim 3.

**【請求項5】**

請求項1、2、3、4において、ICカードを紛失及び破損したりし、手元にICカードが無い場合の装置2へのアクセスを必要があれば制御しながら、装置2の各種資源を利用させる方法。

**[CLAIM 5]**

In Claim 1, 2, 3, 4, in case there is no IC card at hand by losing and damaging an IC card, the method of exploiting the various resources of equipment 2, while controlling access to equipment 2, if necessity.

**【請求項6】**

請求項5において、アクセス制御に関する設定を管理者や必要であれば更に他の人間や装置にも可能にする方法。

**[CLAIM 6]**

In Claim 5, the method to enable an administrator and further another human being or equipment, if required, to setup access control.

**【請求項7】**

請求項6において、アクセス制御に関する設定を管理者のみが、他の特定の種類の人間や装置によってさせる方法。

**[CLAIM 7]**

In Claim 6, the method to which only an administrator does a setup about access control with man and equipment of another specific kind.

**【請求項8】**

請求項1から7において、ICカードの代用に、磁気記録面のストライプを含む各種磁気記録装置があるカードや装置、FLASH ROM, EEPROM, EPROM, MASK ROMを含む各種電子記憶装置があるカードや装置、相変化や色素や光磁気媒体を利用した光記録装置のあるカードや装置、使用者その他の各保安及び防犯及び保護管理単位に一意的に又は多意的に対応する顔写真

**[CLAIM 8]**

In Claim 1 to 7, the method to use a card and equipment with the various magnetic recording equipments which contain the stripe of a magnetic record surface, a card and equipment with various electronic memory of an electron containing FLASH ROM, EEPROM, EPROM, and MASK ROM, a card and equipment with the optical recording equipment using a phase transition, coloring matter, or a magneto-optical medium, a card and equipment which recorded pictures, such as a photograph of the face corresponding uniquely or in many minds to

等の画像を印刷などで記録したカードや装置、更にホログラム等を搭載したカードや装置を使う方法。

each security, crime prevention, and protection, equipment, and a user and others, by printing etc., and further a card and equipment which mounts a hologram etc., in substitution of an IC card,

**【請求項9】**

請求項1から8において、使用者その他の各保安及び防犯及び保護管理単位に一意的に又は多意的に対応する顔写真や網膜画像等の画像や音声を、一部又は全体を、画像や音声圧縮又は他の方法により生データ又はスペクトルや自己相関や自己回帰モデル等の係数等のパラメータ表示等の変換データの生又は各種特徴を全部又は一部抽出し、これを必要であれば暗号化情報の一部分又は総てとして、上記携帯装置とコンピューターに分散し又は全体を記録し、全体の場合は一致、部分の場合は一致、更に部分の場合は必要があれば他の部分との生データ又はスペクトルや自己相関等の変換データでの0次微分以上の部分的分的(piece wise)又は完全な連続性を持つように記録しておき、これらを検証時にコンピューター側の別の管理情報の中の記録情報に基づいて項目を選らび、コンピューターに光学装置や音声収録装置をそれぞれ対応する物理量を計測するために接続し、検証に対応する物理量の検証に利用する対応する部分とそ

**[CLAIM 9]**

In Claim 1 to 8, it carries out all or a part extraction of raw of conversion data, such as a parameter display of coefficients, such as raw data or a spectrum, an auto-correlation, and an autoregressive model, etc., or the various characteristics for the a part or whole by the picture, or voice compression or the other method, the pictures or voices such as a face and a retina picture, which is corresponding uniquely or in many minds to control unit of each security, crime prevention, and protection a user and others, if required, it will distribute this to the above-mentioned portable equipment and a computer as all or a part of the encryption, or it records the whole, in the case of the whole, in the case of an alignment and a portion, it records in the case of a portion, having a partial (piece wise) or perfect continuity more than the 0th differential in conversion data, such as raw data or a spectrum with another portion, and an auto-correlation, if there is necessity further, and it selects an item based on the recorded information in another management information by the side of a computer at the time of verification of these, and it connects an optical instrument and voice recording equipment with a computer in order to measure an alignment and the physical quantity which respectively

の周辺部分又は全部を検証用に計測し収集し処理し、前記の一致や連続性等の検証をし、検証を合格した時のみアクセスを許可する方法。

corresponds, it measures, collects and processes to verification the corresponding portion which it uses for verification of the physical quantity corresponding to verification, its periphery portion, or all, it verifies the above-mentioned alignment, a continuity, etc., the method to permit access only when verification is passed.

**【請求項10】**

請求項1から9において、暗号化された情報の履歴をその内容と共に任意に携帯装置に複数記録し、コンピューター等の検証装置にはこれらを総て含む情報を記録し、この携帯用の記録から読み取ったすべての物が完全に検証装置に記録された情報の一部又は総てと一致する時にのみアクセスを許可する方法。

**[CLAIM 10]**

In Claim 1 to 9, it records two or more logs of the enciphered information on portable equipment as desired with the contents, it records the information containing these all on verification equipment, such as a computer, the method to permit access only when all the things read in this portable record are in agreement with a part of information or all that was completely recorded on verification equipment.

**【請求項11】**

請求項1から10の方法を用いる保安、保護、防犯装置と保安、防犯、保護機能のあるコンピューターを含む各種電子機器。

**[CLAIM 11]**

the various electronic equipments containing a computer with the functions of security, protection, crime prevention equipment and security, crime prevention, using the method of Claim 1 to 10,

**【発明の詳細な説明】****[DETAILED DESCRIPTION OF THE INVENTION]****【0001】****[0001]****【産業上の利用分野】**

保安及び保護機能の高いコンピ

**[INDUSTRIAL APPLICATION]**

The computer paraphernalia and the



ユータ装置や通信装置。

communication apparatus with excellent functions of security and protection.

【0002】

【0002】

【従来の技術】

コンピュータの内部または外部の記憶装置にすべてのアクセス制御用のデータと管理ソフトウェアがあり、まったく情報はパスワード等の暗号の使用者による記憶情報にのみたより、使用時に会話型端末等のコンピュータの資源を利用しパスワードを入力し検証する方法で、使用者がわすれたり、漏洩したり、暗号を記録していて盗まれた場合やコンピュータの内部または外部の記憶装置が不法に改竄された場合には保護機能が機能しなかった。特に、企業では、犯罪が企業ぐるみの場合、打つすべが無かった。

【PRIOR ART】

The data and executive software for all access control are in the memory storage of the inside of a computer, or the exterior.

Information exploits reliance only for the memory information by the user of codes, such as a password, and exploits the resources of computers, such as a conversational mode terminal, at the time of use, it is the method of entering and verifying a password and a user completely forgets it.

It reveals, when the memory storage of the inside of the case where were recording the code and it is stolen, or a computer, or the exterior was altered unlawfully, a protection function did not function.

Particularly, in a company, when a crime was a company-basis, there was no way to strike.

【0003】

【0003】

【発明が解決しようとする課題】

コンピュータの内部または外部の記憶装置に記録したパスワードを、パスワード等の暗号の使用者による記憶情報にのみたより、使用時に会話型端末等のコンピュータの資源を利用しパスワードを入力し検証する方法よりも、保

【PROBLEM TO BE SOLVED BY THE INVENTION】

For the password recorded on the memory storage of the inside of a computer, or the exterior, rather than the method depending only on the memory information by the user of codes, such as a password and exploiting the resources of computers, such as a conversational mode terminal, at the time of

安、防犯、保護による安全の保障の確率を高める事。

use, and entering and verifying a password, it raises the probability of security of the safety by security, crime prevention, and protection.

**【0004】****【課題を解決するための手段】**

ICカード記録及び読み取り装置1を利用して、コンピューター又は通信装置等の各種電子機器2の一つ以上の製造者、販売者、保守者、所有者、法律施行者、警察官、司法捜査官、管理者、使用者等に対応する一つ以上のアカウント、タスク、ジョブ、プロセス等の任意に規定した保護対象作業又は資源単位ごとに、防犯用又は保安用又は保護用又はこれらすべての用途の各種情報と、必要であれば更に、使用記録等の情報をICカード3に記録し、それを防犯用又は保安用又は保護用又はこれらすべての用途と使用記録等の情報の記録用に利用する方法。

**【0005】**

第2の方法は第1の方法において、防犯用又は保安用又は保護用又はこれらすべての用途用情報又は使用記録等の情報をコンピューターを含む各種電子機器2とICカード3に分散して記録する方法。第3の方法は第2までの方法において、防犯用又は保安用又は保護用又はこれらすべての

**[0004]****[MEANS TO SOLVE THE PROBLEM]**

Using IC-card record and reading equipment 1, for every operation for protection or resource units specified as desired, such as 1 or more account, a task, a job, and a process corresponding to the manufacturer, a seller, a maintenance person, an owner, a law enforcement person, a policeman, a judicial investigator, an administrator, a user etc. of 1 or more various electronic equipments 2, such as a computer or a communication apparatus, the method to record, on IC card 3, the variety of information of the object for crime prevention, the object for security, the object for protection, or all these uses, and further use record, etc. if required, and use them for record of information for the object for crime prevention, the object for security, the object for protection or all these uses, and use record, etc.

**[0005]**

2nd method is, in 1st method, a method to distribute and record the object for crime prevention, the object for security, the object for protection, all the these information for uses, or information, such as use record, on the various electronic equipments 2 and IC card 3 containing a computer.  
3rd method, in the method of until 2nd, includes the use record from the past in the object for

用途用情報の中に過去からの使用記録を含ませ、更に一意性を持たせるための情報を付加し、これを利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報と、防犯用又は保安用又は保護用又はこれらすべての用途用内部処理用に各種暗号法により暗号化された情報を防犯用又は保安用又は保護用又はこれらすべての用途用情報に含ませ記録する方法。

crime prevention, the object for security, the object for protection, or all the these information for uses, furthermore, it adds the information for giving uniqueness, a method to let include the information which is not enciphered by the various code methods for seeing when a user wants to regard this as there being no worries about an alteration etc., and the information enciphered by various code methods the object for crime prevention, the object for security, the object for protection, or for uses for all of these and for internal processings in the object for crime prevention, the object for security, the object for protection, or all the these information for uses, and record it.

**【0006】**

第4の方法は第3の方法において利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報の記録を除く方法。

**[0006]**

4th method is the method of excluding record of the information which is not enciphered by the various code methods for seeing when a user wants to conclude that there are no worries about an alteration etc. in 3rd method.

**【0007】**

第5の方法は第4までの方法において、ICカードを紛失及び破損したりし、手元にICカードが無い場合の装置2へのアクセスを必要があれば制御しながら、装置2の各種資源を利用させる方法。

**[0007]**

5th method, in the method of until 4th, loses and damages an IC card, the method of exploiting the various resources of equipment 2, while controlling, if there is necessity access to equipment 2 in case there is no IC card at hand.

**【0008】**

第6の方法は第5の方法において、アクセス制御に関する設定を管理者や必要であれば更に他の人間や装置にも可能にする方

**[0008]**

6th method is, in 5th method, the method to enable an administrator and another human being or equipment further, if required, to setup access control.

法。第7の方法は第6の方法において、アクセス制御に関する設定を管理者のみが、他の特定の種類の人間や装置によってさせる方法。

**【0009】**

第8の方法は第7の方法において、ICカードの代用に、磁気記録面のストライプを含む各種磁気記録装置があるカードや装置、FLASH ROM, EEPROM, EPROM, MASK ROMを含む各種電子記憶装置があるカードや装置、相変化や色素や光磁気媒体を利用した光記録装置のあるカードや装置、使用者その他の各保安及び防犯及び保護管理単位に一意的に又は多意的に対応する顔写真等の画像を印刷などで記録したカードや装置、更にホログラム等を搭載したカードや装置を使う方法。

**【0010】**

第9の方法は第8までの方法において、使用者その他の各保安及び防犯及び保護管理単位に一意的に又は多意的に対応する顔写真や網膜画像等の画像や音声、一部又は全体を、画像や音声圧縮又は他の方法により生データ又はスペクトルや自己相関や自己回帰モデル等の係数等のパラメータ表示等の変換データの生

7th method is, in 6th method, the method to which only an administrator does a setup about access control with man and equipment of another specific kind.

**[0009]**

8th method is, in 7th method, a card and equipment with the various magnetic recording equipments which contain the stripe of a magnetic record surface in substitution of an IC card, a card and equipment with various electronic memory of an electron containing FLASH ROM, EEPROM, EPROM, and MASK ROM, the method to use the card which recorded pictures, such as a photograph of the face corresponding to each security, crime prevention, and protection executive unit of a card with the optical recording equipment using a phase transition, coloring matter, or a magneto-optical medium, equipment, and a user and others, by printing etc. uniquely or in many minds, equipment, and the card which mounts a hologram etc. further and equipment.

**[0010]**

9th method, in the method of until 8th, carries out all or a part extraction of raw of conversion data, such as a parameter display of coefficients, such as raw data or a spectrum, an auto-correlation, and an autoregressive model, etc., or the various characteristics for the whole by the picture, or voice compression or the other method in part, the pictures or voices such as a face and a retina picture, which is corresponding uniquely or in many minds to

又は各種特徴を全部又は一部抽出し、これを必要であれば暗号化情報の一部分又は総てとして、上記携帯装置とコンピューターに分散し又は全体を記録し、全体の場合は一一致、部分の場合は一一致、更に部分の場合には必要があれば他の部分との生データ又はスペクトルや自己相関等の変換データでの0次微分以上の部分的 (piece wise) 又は完全な連続性を持つように記録しておき、これらを検証時にコンピューター側の別の管理情報の中の記録情報に基づいて項目を選らび、コンピューターに光学装置や音声収録装置をそれぞれ対応する物理量を計測するために接続し、検証に対応する物理量の検証に利用する対応する部分とその周辺部分又は全部を検証用に計測し収集し処理し、前記の一致や連続性等の検証をし、検証を合格した時のみアクセスを許可する方法。第10の方法は第9までの方法において、暗号化された情報の履歴をその内容と共に任意に携帯装置に複数記録し、コンピューター等の検証装置にはこれらを総て含む情報を記録し、この携帯用の記録から読み取ったすべての物が完全に検証装置に記録された情報の一部又は総てと一致する時にのみアクセスを許可する方法。

control unit of each security, crime prevention, and protection a user and others, if required, it will distribute this to the above-mentioned portable equipment and a computer as a part or all the encryption, or it records the whole, in the case of the whole, in the case of an alignment and a portion, it records in the case of a portion, having a partial (piece wise) or perfect continuity more than the 0th differential in conversion data, such as raw data or a spectrum with another portion, and an auto-correlation, if there is necessity further, and it selects an item based on the recorded information in another management information by the side of a computer at the time of verification of these, and it connects an optical instrument and voice recording equipment with a computer in order to measure an alignment and the physical quantity which respectively corresponds, it measures, collects and processes to verification the corresponding portion which it uses for verification of the physical quantity corresponding to verification, its periphery portion, or all, it verifies the above-mentioned alignment, a continuity, etc., the method to permit access only when verification is passed.

10th method, in the method of until 9th, records two or more logs of the enciphered information on portable equipment as desired with the contents, it records the information containing these all on verification equipment, such as a computer, the method to permit access only when all the things read in this portable record are in agreement with a part of information or all that was completely recorded on verification

equipment.

**【0011】**

第11の方法は第10までの方法の方法を用いる保安、保護、防犯装置と保安、防犯、保護機能のあるコンピューターを含む各種電子機器。以上の方法と装置により、前記の課題を解決する。

**【0011】**

11th methods are the various electronic equipments containing a computer with the security which uses the method of the method of until 10th, protection, crime prevention equipment and security, crime prevention, and a protection function.

With the method and equipment of a more than, it solves the above-mentioned problem.

**【0012】****【発明の実施の形態】**

ICカード記録及び読み取り装置1を利用して、コンピューター又は通信装置等の各種電子機器2の一つ以上の製造者、販売者、保守者、所有者、法律施行者、警察官、司法捜査官、管理者、使用者等に対応する一つ以上のアカウントやタスク、ジョブ、プロセス等の任意に規定した保護対象作業又は資源単位ごとに、防犯用又は保安用又は保護用又はこれらすべての用途の各種情報と、必要であれば更に、使用記録等の情報をICカード3に記録し、それを防犯用又は保安用又は保護用又はこれらすべての用途と使用記録等の情報の記録用に利用する方法。第2の方法は第1の方法において、防犯用又は保安用又は保護用又はこれらすべての用途用情報又は使用記録等の情報をコ

**【0012】****【EMBODIMENT OF THE INVENTION】**

It uses IC-card record and reading equipment 1, the 1 or more manufacturer of the various electronic equipments 2, such as a computer or a communication apparatus, a seller, a maintenance person, an owner, a law enforcement person, a policeman, a judicial investigator, an administrator, for every operation for protection specified as desired or resource units, such as 1 or more account corresponding to a user etc., a task, a job, and a process, with the variety of information of the object for crime prevention, the object for security, the object for protection, or all these uses, if required, it will record information, such as use record, on IC card 3 further, the method to use it for record of the object for crime prevention, the object for security, the object for protection or all these uses, and information, such as use record.

2nd method is, in 1st method, a method to distribute and record the object for crime

ンピューターを含む各種電子機器2とICカード3に分散して記録する方法。第3の方法は第2までの方法において、防犯用又は保安用又は保護用又はこれらすべての用途用情報の中に過去からの使用記録を含ませ、更に一意性を持たせるための情報を付加し、これを利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報と、防犯用又は保安用又は保護用又はこれらすべての用途用内部処理用に各種暗号法により暗号化された情報を防犯用又は保安用又は保護用又はこれらすべての用途用情報に含ませ記録する方法。第4の方法は第3の方法において利用者が改竄等の心配が無いと見たいときに見るための各種暗号法により暗号化されていない情報の記録を除く方法。第5の方法は第4までの方法において、ICカードを紛失及び破損したりし、手元にICカードが無い場合の装置2へのアクセスを必要があれば制御しながら、装置2の各種資源を利用させる方法。第6の方法は第5の方法において、アクセス制御に関する設定を管理者や必要であれば更に他の人間や装置にも可能にする方法。第7の方法は第6の方法において、アクセス制御に関する設定を管理者のみが、他の特定の種類の人間や装置によってさせる方法。第

prevention, the object for security, the object for protection, all the these information for uses, or information, such as use record, on the various electronic equipments 2 and IC card 3 containing a computer.

3rd method, in the method of until 2nd, includes the use record from the past in the object for crime prevention, the object for security, the object for protection, or all the these information for uses, furthermore, it adds the information for giving uniqueness, a method to let include the information which is not enciphered by the various code methods for seeing when a user wants to regard this as there being no worries about an alteration etc., and the information enciphered by various code methods the object for crime prevention, the object for security, the object for protection, or for uses for all of these and for internal processings in the object for crime prevention, the object for security, the object for protection, or all the these information for uses, and record it.

4th method is the method of excluding record of the information which is not enciphered by the various code methods for seeing when a user wants to conclude that there are no worries about an alteration etc. in 3rd method.

5th method, in the method of until 4th, loses and damages an IC card, the method of exploiting the various resources of equipment 2, while controlling, if there is necessity access to equipment 2 in case there is no IC card at hand.

6th method, in 5th method, the method to enable an administrator and another human being or equipment further, if required, to setup access control.

8の方法は第7の方法において、ICカードの代用に、磁気記録面のストライプを含む各種磁気記録装置があるカードや装置、FLASH ROM, EEPROM, EPROM, MASK ROMを含む各種電子記憶装置があるカードや装置、相変化や色素や光磁気媒体を利用した光記録装置のあるカードや装置、使用者その他の各保安及び防犯及び保護管理単位に一意的に又は多意的に対応する顔写真等の画像を印刷などで記録したカードや装置、更にホログラム等を搭載したカードや装置を使う方法。第9の方法は第8までの方法において、使用者その他の各保安及び防犯及び保護管理単位に一意的に又は多意的に対応する顔写真や網膜画像等の画像や音声、一部又は全体を、画像や音声圧縮又は他の方法により生データ又はスペクトルや自己相関や自己回帰モデル等の係数等のパラメータ表示等の変換データの生又は各種特徴を全部又は一部抽出し、これを必要であれば暗号化情報の一部分又は総てとして、上記携帯装置とコンピューターに分散し又は全体を記録し、全体的場合は一致、部分の場合は一致、更に部分の場合は必要があれば他の部分との生データ又はスペクトルや自己相関等の変換データでの0次微分以上の部分的(piece wise)又は完全な連続性を持

7th method is, in 6th method, the method to which only an administrator does a setup about access control with man and equipment of another specific kind.

8th method is, in 7th method, a card and equipment with the various magnetic recording equipments which contain the stripe of a magnetic record surface in substitution of an IC card, a card and equipment with various electronic memory of an electron containing FLASH ROM, EEPROM, EPROM, and MASK ROM, the method to use the card which recorded pictures, such as a photograph of the face corresponding to each security, crime prevention, and protection executive unit of a card with the optical recording equipment using a phase transition, coloring matter, or a magneto-optical medium, equipment, and a user and others, by printing etc. uniquely or in many minds, equipment, and the card which mounts a hologram etc. further and equipment.

9th method, in the method of until 8th, carries out all or a part extraction of raw of conversion data, such as a parameter display of coefficients, such as raw data or a spectrum, an auto-correlation, and an autoregressive model, etc., or the various characteristics for the whole by the picture, or voice compression or the other method in part, the pictures or voices such as a face and a retina picture, which is corresponding uniquely or in many minds to control unit of each security, crime prevention, and protection a user and others, if required, it will distribute this to the above-mentioned portable equipment and a computer as a part or all the encryption, or it records the whole, an



つように記録しておき、これらを検証時にコンピューター側の別の管理情報の中の記録情報に基づいて項目を選らび、コンピューターに光学装置や音声収録装置4をそれぞれ対応する物理量を計測するために接続し、検証に対応する物理量の検証に利用する対応する部分とその周辺部分又は全部を検証用に計測し収集し処理し、前記の一致や連続性等の検証をし、検証を合格した時のみアクセスを許可する方法。第10の方法は第9までの方法において、暗号化された情報の履歴をその内容と共に任意に携帯装置に複数記録し、コンピューター等の検証装置にはこれらを総て含む情報を記録し、この携帯用の記録から読み取ったすべての物が完全に検証装置に記録された情報の一部又は総てと一致する時にのみアクセスを許可する方法。第11の方法は第10までの方法の方法を用いる保安、保護、防犯装置と保安、防犯、保護機能のあるコンピューターを含む各種電子機器。以上の方法と装置により、前記の課題を解決する。

alignment in the case of the whole, an alignment in the case of a portion, recording in the case of a portion, having a partial (piece wise) or perfect continuity more than the 0th differential in conversion data, such as raw data or a spectrum with another portion, and an auto-correlation, if there is necessity further

it selects an item based on the recorded information in another management information by the side of a computer at the time of verification of these, and it connects an optical instrument and voice recording equipment with a computer in order to measure an alignment and the physical quantity which respectively corresponds, its periphery portion, or all, it verifies the above-mentioned alignment, a continuity, etc., the method to permit access only when verification is passed.

10th method, in the method of until 9th, records two or more logs of the enciphered information on portable equipment as desired with the contents, it records the information containing these all on verification equipment, such as a computer, the method to permit access only when all the things read in this portable record are in agreement with a part of information or all that was completely recorded on verification equipment.

11th methods are the various electronic equipments containing a computer with the security which uses the method of the method of until 10th, protection, crime prevention equipment and security, crime prevention, and a protection function.

With the method and equipment of a more than, it solves the above-mentioned problem.

**【0013】****【発明の効果】**

上記の方法と装置によりコンピューターや通信装置等の電子機器の保安、防犯、保護による安全の保障の確率を高める事が可能である。

**[0013]****[ADVANTAGE OF THE INVENTION]**

Above method and equipment can raise the probability of security of the safety by security of electronic equipments, such as a computer and a communication apparatus, crime prevention, and protection.

**【図面の簡単な説明】****[BRIEF DESCRIPTION OF THE DRAWINGS]****【図1】**

本保護方法を用いるICカードを利用した電子機器の概略図

**[FIG. 1]**

The schematic diagram of the electronic equipment using the IC card using this protection method

**【符合の説明】**

- 1、ICカード記録及び読み取り装置
- 2、コンピューター又は通信装置等の保護対象各種電子機器
- 3、ICカード

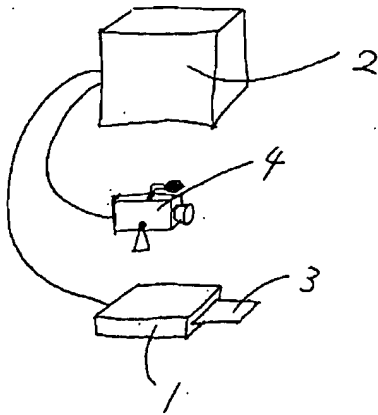
**[DESCRIPTION OF SYMBOLS]**

- 1, IC-card record, and reading equipment
- Various electronic equipments for protection, such as 2, a computer, or a communication apparatus
- 3 IC card

- 4、検証用使用者測定光学装置や音声収録装置

- 4, the user measurement optical instrument for verification and voice recording equipment

**【図1】****[FIG. 1]**



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